

HOV/MUL Pooled Fund Study Quarterly Status Report April 2009

Brief descriptions of completed, current and future projects are provided in the following paragraphs. Additional information can be found at the HOV/MUL Pooled Fund Study web page at <http://hovpfs.ops.fhwa.dot.gov/>.

HOV Facility Performance Monitoring, Evaluation and Reporting Handbook: The purpose of this project is to develop a handbook that will serve as a technical reference that provides guidance and recommended practices on the need for, how to initiate, sustain, and use information generated from monitoring, evaluating, and reporting on the performance of HOV facilities. This document is intended to be a comprehensive technical reference providing guidance on how to develop, implement, improve, and sustain a continuous performance monitoring, data management, evaluation and reporting program or initiative for an HOV system.

Project Champion: Mark Leth (Washington State DOT) and Steve Allen (Tennessee DOT)
FHWA Work Order Manager: Neil Spiller
Contractor Lead: Katie Turnbull (Texas Transportation Institute)
Project Cost: \$300,000 (FHWA Funds)
Period of Performance: 20 months

Products & Milestones:

- This project has been completed.
- Available Products: Handbook, Primer, Project Fact Sheet, Tri-Fold Brochure, FAQ's, and Presentations.

Analysis of HOV Lane Hours of Operations and Eligibility Requirements: The overall objective of this project is to develop a handbook that will serve as a technical reference that provides guidance and recommended practices on how to assess specific policy-level choices and basic trade-offs related to setting and changing eligibility, operating periods and access restrictions between the HOV lane and general purpose lanes.

Project Champion: Mena Lockwood (Virginia DOT) and Wayne Ugolik (New York State DOT)
FHWA Work Order Manager: Neil Spiller
Contractor Lead: Katie Turnbull (Texas Transportation Institute)
Project Cost: \$125,000
Period of Performance: 15 months

Products & Milestones:

- Handbook – Final draft version is available on project web page; Final version is pending on the approval of FHWA HOV Guidance (Final Guidance published in August 2008).
- Outreach Material (fact sheet, FAQ's) – Final draft versions are available on project web page; Final versions are pending on the approval of FHWA HOV Guidance.

Analysis of HOV Lane Hours of Operations and Eligibility Requirements – Primer, Tri-Fold Brochure, and Presentations: The focus of this project is to develop additional outreach materials that were not covered in the initial phase of the project to assist in facilitating the transfer and use of the concepts and practices included in the technical reference to non-technical audiences that are critical to implementing and support HOV operation. These outreach materials will identify for a non-technical

audience the key aspects and issues for their agencies to consider, the benefits and/or value, recommended practices and lessons learned, and profile successful practices.

Project Champion: Mena Lockwood (Virginia DOT) and Wayne Ugolik (New York State DOT)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Rob Fernandez (Woodward Communications)

Project Cost: \$35,000

Period of Performance: 6 months

Products & Milestones:

- This project has been completed.
- Available Products: Primer, tri-fold brochure, and PowerPoint presentation.

HOV Lane Enforcement Handbook: The purpose of this project is to develop a technical document that provides an update of state-of-the practice, with an emphasis on expanding on previous reference material and providing better focus on the use of technology in enforcement activities. Specifically, the effort would review past reference material such as the FHWA Enforcement Requirements for HOV Facilities (1978) and Caltrans HOV Lane Violations Study (1990); obtain input and survey enforcement practice from representatives of enforcement agencies involved in HOV projects, survey current technologies and their applicability to occupancy enforcement and update earlier prototype statutes from the FHWA Enforcement Requirements for HOV Facilities Guide that could be used to implement automated violation enforcement.

Project Champion: Wayne Ugolik (New York State DOT)

FHWA Work Order Manager: Jessie Yung

Contractor Lead: Ginger Goodin (Texas Transportation Institute)

Project Cost: \$150,000

Period of Performance: 15 months

Products & Milestones:

- Handbook – Final draft version is available on project web page; Final version is pending on the approval of FHWA HOV Guidance (Final Guidance published in August 2008).
- Outreach Material (fact sheet, brochure, presentation, and FAQ's) – Final draft versions are available on project web page; Final versions are pending on the approval of FHWA HOV Guidance.
- White Paper – Available on project web page.

HOV Lane Safety Considerations Handbook: The purpose of this project is to develop a technical document addressing the issues, experience, considerations and best practices for safety enhancements of HOV facilities. Specifically, this effort will review existing reference materials, HOV facilities, facility operators and design practitioners throughout the United States in order to inventory existing guidance, practice and performance results, and develop guidance for design and operational considerations and recommended practices for safe design and operations of HOV facilities.

Project Champion: Laine Rankin (New Jersey DOT) and Mena Lockwood (Virginia DOT)

FHWA Work Order Manager: Jessie Yung

Contractor Lead: Ginger Goodin (Texas Transportation Institute)

Project Cost: \$200,000

Period of Performance: 16 months

Products & Milestones:

- Handbook – Final draft version is available on project web page; Final version is pending on the approval of FHWA HOV Guidance (Final Guidance published in August 2008).
- Outreach Material (fact sheet, brochure, presentation, and FAQ's) – Final draft versions are available on project web page; Final versions are pending on the approval of FHWA HOV Guidance.
- White Paper – Available on project web page.

Automated Vehicle Occupancy Technologies Study: The objective of this project is to identify, compile, and systematically evaluate concepts, methods, and technologies for automated vehicle occupancy detection, verification and enforcement that are being researched, under development and on the horizon in the United States and abroad. Findings of this project will assist in identifying, developing, and implementing cost-effective, automated techniques for verifying and enforcing vehicle occupancy to continue offering high occupancy vehicle (HOV) preference in an effective way.

Project Champion: Laine Rankin (New Jersey DOT) and Mark Leth (Washington State DOT)

FHWA Work Order Manager: Jessie Yung

Contractor Lead: Ginger Goodin (Texas Transportation Institute)

Project Cost: \$100,000

Period of Performance: 12 months

Products & Milestones:

- This project has been completed.
- Available Products: Synthesis Report, White Paper, Concept of Operations Document, Presentation, and Fact Sheet.

HOV Facility Inventory and Clearinghouse: The overall objective of this project is to promote the exchange of HOV facility information between practitioners. By surveying HOV practitioners, consistent communication protocols can be established for the most commonly collected HOV data. Recipients would primarily be HOV practitioners at every level, and anybody with interest or knowledge in HOV related subjects with a need for information or desire to impart knowledge to others.

Project Champion: Jessie Yung

FHWA Work Order Manager: Jessie Yung

Contractor Lead: Jeff Benson/Ming-Shiun Lee (URS)

Project Cost: \$100,000

Period of Performance: 14 months

Products & Milestones:

- HOV Clearinghouse Web Site – Final draft web site can be accessed through the project web page; final website is undergoing FHWA 508 compliance review.
- Outreach material (fact sheet, presentations, and FAQ's) – Final draft versions are available on the project web page; final versions are undergoing FHWA 508 compliance review.

Implications of Lane Pricing on Existing HOV Lanes: The purpose of this project is to develop a technical document that identifies technical, institutional, and organizational implications and provides guidance and recommended practices on planning and implementing pricing techniques on converting existing High Occupancy Vehicles (HOV) lanes into High Occupancy Toll (HOT) lanes. This project builds off of the FHWA HOT Lane Development Guide and provides more detailed guidance, procedures, and processes to assist practitioners in implementing pricing techniques on existing HOV lanes.

Project Champion: Mena Lockwood (Virginia DOT)
FHWA Work Order Manager: Jessie Yung
Contractor Lead: John Wiegmann (Booz Allen Hamilton)
Project Cost: \$150,000
Period of Performance: 14 months

Products & Milestones:

- Handbook – Final draft version is available on the project web page; final version is undergoing FHWA 508 compliance review.
- Outreach material (fact sheet, presentation, and primer) – Final draft versions are available on the project web page; final versions are undergoing FHWA 508 compliance review.